

Serial No.: 10/708,404  
Confirmation No.: 2403  
Applicant: HENNE, Preston A. *et al.*  
Atty. Ref.: 03130.0004.CPUS02

**REMARKS:**

**REMARKS REGARDING CLAIMS AMENDMENTS:**

Claims 1-8 are currently pending in the application. Applicant has amended claims 1 and 6. Furthermore, Applicant has added new claims 7 and 8. Support for amended claims 1 and 6 and new claims 7 and 8 can be found in paragraph 0106 as well as Figure 25 of the current application. The Applicant has also amended the abstract of the disclosure and first paragraph of the application in conformance with the Examiner's suggestions.

**IN RESPONSE TO THE OFFICE ACTION:**

**NON-STATUTORY DOUBLE PATENTING REJECTION:**

Claims 1-5 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 32, 33, 35, 36, 39 of US Patent No. 6,698,684 B1. Further, Claim 6 was rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 32, 39 of US Patent No. 6,698,684 B1 in view of Killian (US 3412962).

A timely filed terminal disclaimer may be used to overcome a non-statutory double patenting rejection. Therefore, the Applicant has included a terminal disclaimer with this reply in order to obviate the obviousness-type double patenting rejection of claims 1-6 wherein US Patent No. 6,698,684 is the primary reference. Favorable action is hereby solicited.

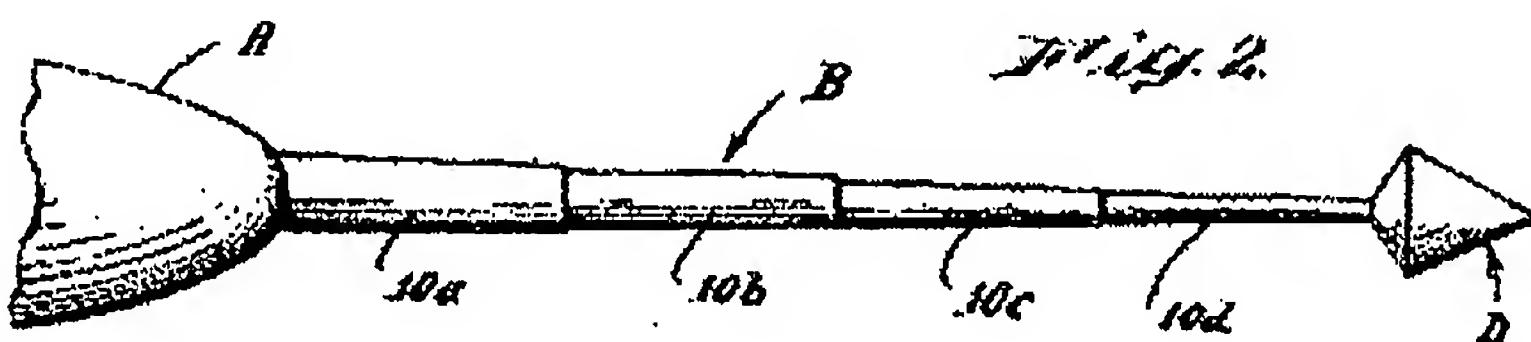
**REJECTION UNDER 35 U.S.C. § 102(b):**

Claims 1-4 were rejected under 35 U.S.C. § 102(b) as being anticipated by Silva (US 3425650).

The Examiner asserts that Silva anticipates claims 1-4 because Silva includes a leading end portion D tapering to a forward point; a first section 10c, and a first transition section 10d between the portion D and the first section 10c. However, as can be seen in Fig. 2 of the Silva reference, the conical deflector D has a larger cross-sectional area than elements 10d and 10c.

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The Applicant with this reply has amended claim 1 to recite that "each of successive cross-sectional areas of said first spike taken along said first spike from said leading end portion to said vehicle is at least equal to any cross-sectional area of said first spike located ahead thereof." Silva does not disclose this claimed feature in that many cross-sectional areas taken at the leading expanded end portion D are in fact greater than the following cross-sections taken through the spike as you move toward the vehicle as is aptly shown in Fig. 2 below from the Silva patent.



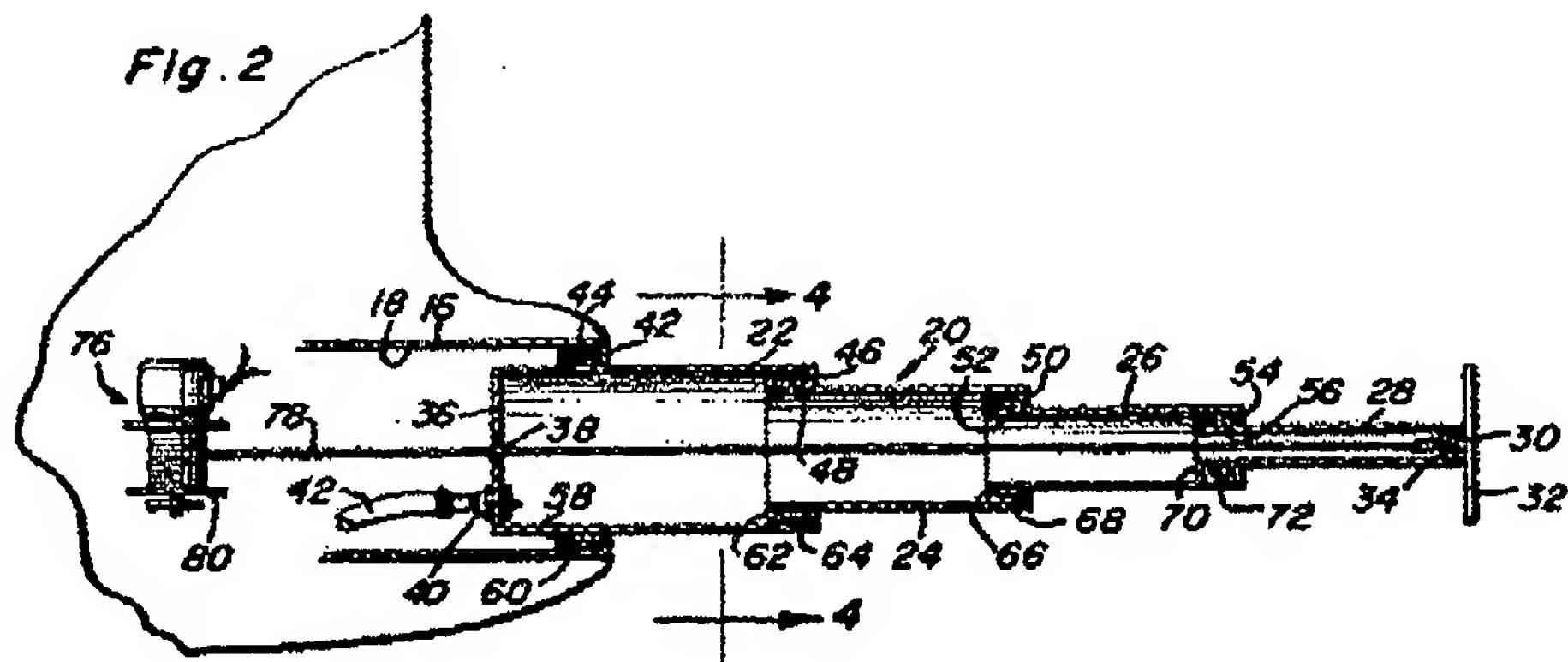
In fact deflector D has a cross-sectional area which is much larger than those sections, 10a-10d, behind the deflector towards the vehicle. Therefore, Silva does not disclose all the elements of the claims 1-4 and so Applicant respectfully requests that the rejection be withdrawn.

Further, Claim 6 was rejected under 35 U.S.C. § 102(b) as being anticipated by Killian (US 3412962).

The Examiner alleged that Killian discloses a rearward spike which tapers to a first predetermined cross-section 28, and includes a first section 24 and a first transition region 26 between the first section and the predetermined cross-section 28.

The Applicant respectfully traverses Examiner's rejection. Killian does not disclose a trailing end portion which tapers to a first predetermined cross-section. Fig. 2 of the Killian reference is shown as follows:

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As can be seen, the trailing end does not taper to a predetermined cross-section. Contrarily, each section ends abruptly and has a sharp 90° edge extending down to the next section, including section 28. Section 28 does not taper but has a constant cross-sectional area as it extends out from section 26.

Furthermore, according to amended claim 6, each successive cross-sectional area of the first spike taken along the first spike from the trailing end portion to the vehicle is at least equal to any cross-sectional area of the first spike located therebehind.

Contrarily, Killian discloses an abutment rod 32 at the end of section 28 which has a larger cross-sectional area than 28, as can be seen in the figure above. Therefore, the cross-section 28 is not at least equal to the section of the spike behind it. Thus, according to amended claim 6, Killian does not disclose all limitations claimed therein.

Given the above, Applicant requests that the rejection of Claims 1-6 under 35 U.S.C. §102(b) be reconsidered and withdrawn and that the Examiner indicate the allowance of the claims in the next paper from the Office.

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REJECTION UNDER 35 U.S.C. § 103(a):

Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Silva in view of Killian.

The Examiner asserts that Silva discloses claim 5 except the aircraft in Silva lack a rear, second spike. It is the Examiner's position that it would have been obvious to provide it with a rear spike, in view of the patent to Killian. However, claim 5 depends from claim 1, as amended, and it is therefore Applicant's position that claim 5 is allowable for the same reasons detailed hereinabove with respect to claim 1. Applicant respectfully requests that the §103 rejection be withdrawn.

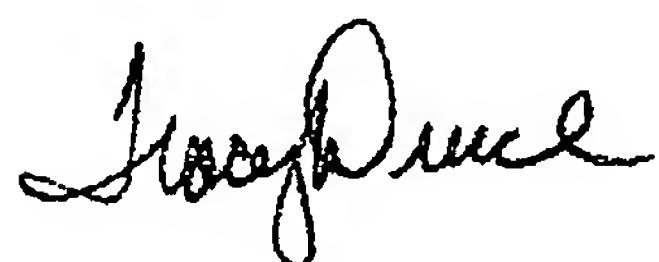
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The undersigned representative requests any extension of time that may be deemed necessary to further the prosecution of this application.

The undersigned representative authorizes the Commissioner to charge any additional fees under 37 C.F.R. 1.16 or 1.17 that may be required, or credit any overpayment, to Deposit Account No. 14-1437, Order No. 03130.0004.CPUS02.

In order to facilitate the resolution of any issues or questions presented by this paper, the Examiner should directly contact the undersigned by phone to further the discussion.

Respectfully submitted,



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